***COMPLETE IN NOTEBOOK! COPY ALL FIGURES!***

CW33/HW33: Intro to A & P

**Geometry**

**READ ALL DIRECTIONS! Failure to show** ALL WORK **and follow** all directions COMPLETELY **will result in LaSalle.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. In your notebook define: Perimeter, Area, Base, Altitude | | | | |
| 1. Fill in the blanks and copy the notes into your notebook.  *Notes*:   a) The altitude of a triangle corresponds to its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. If the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes so does the height.   b) The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a triangle is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ onto the base from it’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ vertex.   c) The altitude of a triangle \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ be outside the triangle, connected to the \_\_\_\_\_\_\_\_\_\_\_\_\_ base. | | | | |
| 1. Ms. Ramos, Mr. Gerber, and Ms. Power each draw what they believe is a base-height pair of a triangle.  |  |  |  | | --- | --- | --- | | Ms. Ramos ../../../../Desktop/Screen%20Shot%202016-11-06%20at%2012.23.07%20PM.pn | Mr. Gerber../../../../Desktop/Screen%20Shot%202016-11-06%20at%2012.23.12%20PM.pn | Ms. Power ../../../../Desktop/Screen%20Shot%202016-11-06%20at%2012.23.02%20PM.pn |   Do you agree with Ms. Ramos, Mr. Gerber, or Ms. Power? Provide an explanation for why you agree or disagree with each. | | | | |
| 1. There are three possible correct base-height pairs for this triangle. Sketch all three.  **../../../../../Desktop/Screen%20Shot%202016-05-08%20at%2012.55.31%20PM** **../../../../../Desktop/Screen%20Shot%202016-05-08%20at%2012.55.31%20PM** **../../../../../Desktop/Screen%20Shot%202016-05-08%20at%2012.55.31%20PM** | | | | |
| 1. Δ*ABC* is formed by A(3,4), B(3,0), and C(7.3).  a) Suppose you chose AB as the base of ΔABC. Identify the height for base AB and provide mathematical evidence to justify why it is valid.   b) Suppose you chose BC as the base of ΔABC. Explain how finding the base-height pair for this BC is different than for AB.   c) Which side, AB or BC, is more convenient to choose as a base-height pair? Explain. | | | | |
| 1. ΔABC is formed by A(5,3), B(2,0), and C(8,-2). a) Suppose we chose AB as the base. Find the equation of the line containing points A and B.   b) Find the equation of the line that is perpendicular to AB and contains point C.   c) Graph the line you found in part b and identify the base-height pair using AB as the base.   d) Calculate the length of of the base and height of ΔABC. | | | | |
| 1. ΔABC is formed by A(6,4), B(2,1), and C(7,0).   a) Find the slope of AB.   b) Find the slope of AC.   c) Use what you found in part a and b to explain why ΔABC is a right triangle. | | | | |
| 1. Graph the following line:**.** Graph and write the equations of two more lines that will create a right triangle in the coordinate plane. | | | | |
| Directions: There are three possible correct base-height pairs for this triangle. Sketch all three. | | | | |
|  | |  | |  |
| Directions: Identify the base and height of each shape below. | | | | |
| 12.  **../../../../../Desktop/Screen%20Shot%202016-05-08%20at%201.48.04%20PM** | 13.  **../../../../../Desktop/Screen%20Shot%202016-05-08%20at%201.49.24%20PM** | | 14.  **../../../../../Desktop/Screen%20Shot%202016-05-08%20at%201.49.43%20PM** | |